



Neck Epidermal Keratinous Cyst Infected with *Morganella Morgani*. Neck Epidermal Cyst

Boyunda *Morganella Morgagni* ile Enfekte Olmuş Epidermal Keratinöz Kist. Boyunda Epidermal Kist

Epidermal Kist / Epidermal Cyst

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Özet

Morganella morgagni ile enfekte olmuş boyun epidermal keratinöz kisti henüz literatürde bulunmamaktadır. Bu olgu sunumunda boyunda *morganella morgagni* ile enfekte olmuş epidermal keratinöz kisti olan 25 yaşında erkek hasta sunulmuştur.

Anahtar Kelimeler

Boyun Kitlesi; Enfeksiyon; Boyun Kistleri

Abstract

Neck keratinous cyst infected with *Morganella Morgani* have not been reported yet. We report case of 25 years old male patient with a keratinous cyst abscess infected by *Morganella Morgani* which was located at midline neck.

Keywords

Neck Mass; Infection; Neck Cysts

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Introduction

In this report we present a case of a keratinous epidermoid cyst abscess caused by a *Morganella Morganii* located at the neck. In our report we describe a neck mass of epidermoid keratinous cyst infected by *morganella morganii* as a sporadic clinical infection. To our knowledge, this is the first case of a neck mass infected with *Morganella Morganii* in literature. This case report indicates that clinicians should be aware that *morganella morganii*, although it is uncommon, can be a cause of neck abscess.

Case Report

A 29-year-old man was admitted to our otorhinolaryngology clinic with the complaints of midline neck swelling with hyperemia and pain for 4 days. Although this swelling had been present for all his life, he had no complaint until it started to cause pain 4 days prior to his admittance. He was afebrile. Physical examination revealed a 3x3 cm midline neck mass in the infrahyoid region with a smooth surface which was mobile and painful with palpation (Figure 1). No movement with swallowing or protrusion of the tongue could be demonstrated. His blood tests were unremarkable and serum HBs antigen, HIV, HCV, EBV, Toxoplasmosis IgM, IgG antibody results were negative. Magnetic resonance imaging of the neck indicated that the 2x4 cm cervical hypodense mass was located in front of the anterior cervical muscles and above the incisura of sternum. The mass also presented centrally cystic-necrotic component and ring enhancement by contrast (Figure 2). The patient underwent abscess drainage and the drainage sample was examined with both microbiologic and pathologic analysis. The patient's course after drainage was uneventful. Oral prophylactic antibiotherapy was administered empirically after drainage (Clarithromycin 500 mg 2x1, orally). After microbiological culture analysis, *Morganella Morganii* was found to be the pathogen microorganism and oral antibiotherapy was not changed. After the treatment of 10 days, there was a substantial regression of the neck lesion, without a recurrence after a one month follow up period (Figure 3). Pathologic analysis revealed an inflamed epidermoid keratinous cyst with an active inflammation (Figure 4).

Discussion

The differential diagnosis in a patient presenting with a neck mass is broad and extensive. The following conditions can result in midline swelling of the neck: Thyroglossal duct cyst, epidermoid cyst, dermoid cyst, submental lenfadenitis, submental abscess, thyroid gland tumors, ectopic thyroid [1]. Therefore, a thorough history and physical examination make up the critical first step in the evaluation of a neck mass. Information gathered from a detailed history and physical examination alone often narrows the differential diagnosis to a more manageable level [2].

Imaging studies provide useful information in diagnosing the etiology of a neck mass. Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) can differentiate solid, cystic, and vascular masses; localize a mass in relation to the vital structures of the neck; and identify a potential head and neck source for the neck mass. Ultrasonography may be helpful in distinguishing solid from cystic masses, especially in the setting of a suspected thyroid lesion [2]. Fine-needle aspiration and/or surgical biopsy will establish the definitive diagnosis and dictate the final course of treatment [1]. Epidermal cysts have been known for many years as a sebaceous cyst, a misnomer born of a mistaken gross interpretation of the cyst content and perpetuated by uncritical repetition [3]. Epidermal cysts are a course of neck masses and historically, two essential types have been identified. The most common type is known as an epidermoid or epidermal inclusion cyst. This represents approximately 90% of keratinous cysts. The second most common type

is termed a pilar or trichilemmal cyst. Cornified epithelium, a very well-demarcated granular layer, and multiple lamellae of keratin without calcification characterize the epidermoid cysts. Additionally, focal calcification is common [3].

These lesions can be found in almost any location. They are frequently found on the scalp, ears, face, back, or scrotum. The majority of these lesions in the head and neck (65%) occur in orbital and nasal regions, whereas 24% arise in the oral cavity [4]. Both CT and MRI may be used to evaluate patients with epidermoid cysts. Epidermoid cysts, though lined by squamous epithelium, do not contain the other cutaneous appendages. Epidermoids typically are unilocular cysts, with a thin wall and contents matching characteristics of water on all MR pulse sequences [4].

On palpation, the cystic mass is firm, globular, movable, and non tender; it seldom causes discomfort unless it has ruptured internally, causing a rapidly enlarging, painful abscess. Keratinous cysts, the most common, are often surmounted with a punctum or pore; their contents are cheesy and often fetid, due to secondary bacterial colonization.

Both bacterial and viral infections can cause inflammatory neck masses. Occasionally, the lymph nodes become necrotic, and form abscess. *Staphylococcus* and *Streptococcus* species are the organism most commonly cultured from neck abscess. In many instances, however, the infection is polymicrobial. A neck abscess usually requires antibiotic therapy, and surgical drainage may be necessary [5].

Morganella Morganii is a gram negative, facultative anaerob rod classified within the Enterobacteriaceae family. This bacteria are usually found in the environment and in the intestinal tracts of humans, mammals, birds and reptiles as normal flora [6].

Although nosocomial epidemics with *Morganella Morganii* have been reported previously in the setting of urinary tract infection, postoperative wound infection, or bacteremia [7], we did not find neck abscess infected with *Morganella Morganii* in literature.

This case report indicates that clinicians should be aware that *Morganella Morganii* can be one of the causes of neck abscess. Appropriate antibiotic treatment and surgical drainage are required for these infections. Practitioners shouldn't forget that a wide bacterial spectrum may be a reason for neck abscess and bacterial culture and antibiogram take an important role for the treatment of the neck abscess.

The choice of the proper antibiotic depends on the antimicrobial susceptibility of the etiologic agent that is obtained by culture and sensitivity results. Needle aspiration of an acutely infected cyst early in the course of treatment is often helpful.

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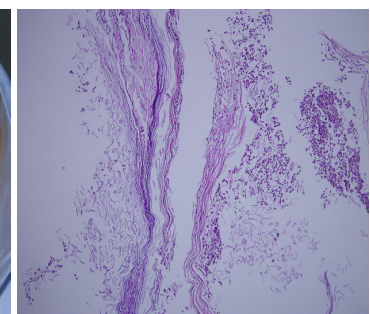


Figure 1. Inflamed midline neck mass, before the treatment.

Figure 2. Magnetic resonance imaging, sagittal view of lesion.

Figure 3. Neck region, after the treatment.

Figure 4. Keratinous cyst of epidermal type with secondary inflammation.